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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/518,990	MIURA ET AL.	
	Examiner	Art Unit	
	Matthew B. Smithers	2437	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 December 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 December 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/21/04; 07/18/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statements filed December 21, 2004 and July 18, 2005 have been placed in the application file and the information referred to therein has been considered as to the merits.

Specification

The disclosure is objected to under 37 CFR 1.75 (d)(1) in which the claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. (See § 1.58(a)). In the instant application, applicant has provided antecedent basis for the claim terminology "storage medium" but has not provided an explicit and deliberate definition for the claimed terminology.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 11-17 are method steps for using specific apparatuses. A claim that encompasses both an apparatus and the method steps of using the apparatus in a single claim has been deemed improper because it is not clear if applicant is attempting to cover only the apparatus or only the method steps of using the apparatus. See for example *Ex parte Lyell*, 17 USPQ 2d 1548 (Bd. Pat. App. & Inter. 1990).

Claims 11-17 are rejected under 35 U.S.C. 101 because the claim is neither directed to a process nor a machine, but rather embraces or overlaps two different statutory classes of an invention set forth in 35 USC 101. See for example *Ex parte Lyell*, 17 USPQ 2d 1548 (Bd. Pat. App. & Inter. 1990).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 11-17 are rejected under 35 U.S.C. 101 because the claim is neither directed to a process nor a machine, but rather embraces or overlaps two different statutory classes of an invention set forth in 35 USC 101. See for example *Ex parte Lyell*, 17 USPQ 2d 1548 (Bd. Pat. App. & Inter. 1990).

Claims 18-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. With respect to claims 18-24, each of the claims are directed to a program for performing specific method steps. Computer program claims do not fall within any of the four statutory classes of an invention as defined in 35 USC 101.

Claims 25-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. With respect to claims 25-30, the "storage readable medium" has not been limited to embodiments which fall within a statutory category (see objection above). In the specification, applicant has provided antecedent basis for the claim terminology "storage medium", however, applicant failed to provide an explicit and deliberate definition for the claimed terminology. The context in which the "storage readable medium" is used in the respective claims would fairly suggest to one of ordinary skill in the art that other forms of media that are not appropriate manufacture under 35 USC 101 could be broadly interpreted as "storage readable medium".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-30 are rejected under 35 U.S.C. 102(e) as being anticipated by US 20030186680 granted to Bhasin et al.

Regarding claim 1, Bhasin meets the claimed limitations as follows: "A terminal-device authentication system characterized by comprising: a service server for, when a service requiring device authentication is supplied to a terminal device, transmitting connection information for a first allocation server to the terminal device and receiving an authentication result from the terminal device; the first allocation server receiving first allocation information from the terminal device and transmitting connection information for a second allocation server corresponding to the first allocation information; the second allocation server receiving second allocation information from the terminal device and transmitting connection information for an authentication server corresponding to the second allocation information; and the authentication server receiving authentication information from the terminal device to perform the device authentication and transmitting the authentication result to the terminal device." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and Figures 2 and 3.

Regarding claim 2, Bhasin meets the claimed limitations as follows:

"The terminal device that utilizes the service provided by the service server in the terminal-device authentication system according to claim 1, the terminal device being characterized by comprising: first receiving means for receiving from the service server the connection information for the first allocation server; first transmitting means for connecting to the first allocation server based on the connection information received by the first receiving means to transmit the first allocation information to the first allocation server; second receiving means for receiving the connection information for the second allocation server corresponding to the transmitted first allocation information from the first allocation server; second transmitting means for connecting to the second allocation server based on the connection information received by the second receiving means to transmit the second allocation information to the second allocation server; third receiving means for receiving from the second allocation server the connection information for the authentication server corresponding to the transmitted second allocation information; authentication-information transmitting means for connecting to the authentication server based on the connection information received by the third receiving means to transmit the authentication information to the authentication server; authentication-result receiving means for receiving from the authentication server the authentication result based on the authentication information transmitted by the authentication-information transmitting means; and authentication-result transmitting means for transmitting the authentication result received by the authentication-result receiving means to the service server." see paragraphs [0014]-[0020] (Wireless client device is considered the terminal device; Home agent is considered the first allocation

server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and Figures 2 and 3.

Regarding claim 3, Bhasin meets the claimed limitations as follows:

"The first allocation server that provides the connection information for the second allocation server to the terminal device in the terminal-device authentication system according to claim 1, the first allocation server being characterized by comprising: receiving means for connecting to the terminal device to receive the first allocation information from the terminal device; and transmitting means for transmitting the connection information for the second allocation server corresponding to the received first allocation information to the terminal device." see paragraph [0020] (Wireless client device is considered the terminal device; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server); paragraphs [0021]-[0026]; and Figures 2 and 3.

Regarding claim 4, Bhasin meets the claimed limitations as follows:

"A terminal-device authentication system characterized by comprising: a service server for, when a service requiring device authentication is supplied to a terminal device, receiving allocation information from the terminal device, receiving connection information for an authentication server from an allocation system based on the received allocation information, transmitting the received connection information to the terminal device, and receiving an authentication result in the authentication server from the terminal device; the allocation system receiving the allocation information from the

service server and transmitting to the service server the connection information for the authentication server corresponding to the received allocation information; and the authentication server receiving authentication information from the terminal device to authenticate the terminal device and transmitting the authentication result of the device authentication to the terminal device." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and Figures 2 and 3.

Regarding claim 5, Bhasin meets the claimed limitations as follows:

"The allocation system that provides the connection information for the authentication server to the service server in the terminal-device authentication system according to claim 4, the allocation system being characterized by comprising: allocation-information receiving means for receiving the allocation information from the service server; and connection-information transmitting means for transmitting the connection information for the authentication server corresponding to the received allocation information." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and Figures 2 and 3.

Regarding claim 6, Bhasin meets the claimed limitations as follows:

"The service server that provides the service to the terminal device in the terminal-device authentication system according to claim 4, the service server being characterized by comprising: allocation-information receiving means for receiving the allocation information from the terminal device; allocation-information transmitting means for transmitting the received allocation information to the allocation system; connection-information receiving means for receiving from the allocation system the connection information for the authentication server corresponding to the transmitted allocation information; and connection-information transmitting means for transmitting the received connection information to the terminal device." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and Figures 2 and 3.

Regarding claim 7, Bhasin meets the claimed limitations as follows:

"The allocation system according to claim 5, the allocation information being characterized by including first allocation information and second allocation information, and the allocation system being characterized by comprising: a first allocation server receiving the first allocation information from the service server and transmitting to the service server connection information for a second allocation server corresponding to the first allocation information; and the second allocation server receiving the second allocation information form the service server and transmitting to the service server the connection information for the authentication server corresponding to the second

allocation information." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and Figures 2 and 3.

Regarding claim 8, Bhasin meets the claimed limitations as follows:

"The service server that receives the connection information for the authentication server from the allocation system according to claim 7, the service server being characterized by comprising: allocation-information receiving means for receiving the first allocation information and the second allocation information from the terminal device; first transmitting means for connecting to the first allocation server to transmit the received first allocation information to the first allocation server; first receiving means for receiving from the first allocation server the connection information for the second allocation server corresponding to the transmitted first allocation information; second transmitting means for connecting to the second allocation server based on the connection information received by the first receiving means to transmit the second allocation information to the second allocation server; second receiving means for receiving from the second allocation server the connection information for the authentication server corresponding to the transmitted second allocation information; and connection-information transmitting means for transmitting the connection information received by the second receiving means to the terminal device." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device;

Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and Figures 2 and 3.

Regarding claim 9, Bhasin meets the claimed limitations as follows:

"The first allocation server that provides the connection information for the second allocation server to the service server in the allocation system according to claim 7, the first allocation server being characterized by comprising: receiving means for receiving the first allocation information from the service server; and transmitting means for transmitting the connection information for the second allocation server corresponding to the received first allocation information." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and Figures 2 and 3.

Regarding claim 10, Bhasin meets the claimed limitations as follows:

"The second allocation server that provides the connection information for the authentication server to the service server in the allocation system according to claim 7, the second allocation server being characterized by comprising: receiving means for receiving the second allocation information from the service server; and transmitting means for transmitting the connection information for the authentication server corresponding to the received second allocation information." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is

considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and Figures 2 and 3.

Regarding claim 11, Bhasin meets the claimed limitations as follows:

"A method for a terminal device, adopted in a computer that utilizes the service provided by the service server in the terminal-device authentication system according to Claim 1, the computer being characterized by comprising first receiving means, first transmitting means, second receiving means, second transmitting means, third receiving means, authentication-information transmitting means, authentication-result receiving means, and authentication-result transmitting means, and the method being characterized by comprising: a first receiving step of receiving, by the first receiving means, the connection information for the first allocation server from the service server; a first transmitting step of connecting to the first allocation server based on the connection information received in the first receiving step to transmit the first allocation information to the first allocation server by the first transmitting means; a second receiving step of receiving, by the second receiving means, the connection information for the second allocation server corresponding to the transmitted first allocation information from the first allocation server; a second transmitting step of connecting to the second allocation server based on the connection information received in the second receiving step to transmit the second allocation information to the second allocation server by the second transmitting means; a third receiving step of receiving, by the third receiving means, the connection information for the authentication server corresponding to the transmitted

second allocation information from the second allocation server; an authentication-information transmitting step of connecting to the authentication server based on the connection information received in the third receiving step to transmit the authentication information to the authentication server by the authentication-information transmitting means; an authentication-result receiving step of receiving, by the authentication-result receiving means, the authentication result based on the authentication information transmitted in the authentication-information transmitting step from the authentication server; and an authentication-result transmitting step of transmitting, by the authentication-result transmitting means, the authentication result received in the authentication-result receiving step to the service server." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and Figures 2 and 3.

Regarding claim 12, Bhasin meets the claimed limitations as follows:

"A first allocation method of providing the connection information for the second allocation server to the terminal device in the terminal-device authentication system according to claim 1, the first allocation method being adopted in a computer including receiving means and transmitting means, and the first allocation method being characterized by comprising: a receiving step of connecting to the terminal device to receive the first allocation information from the terminal device by the receiving means; and a transmitting step of transmitting, by the transmitting means, the connection

information for the second allocation server corresponding to the received first allocation information to the terminal device." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and Figures 2 and 3.

Regarding claim 13, Bhasin meets the claimed limitations as follows:

"An allocation method of providing the connection information for the authentication server to the service server in the terminal-device authentication system according to claim 4, the allocation method being adopted in a computer system including allocation-information receiving means and connection-information transmitting means, and the allocation method being characterized by comprising: an allocation-information receiving step of receiving, by the allocation-information receiving means, the allocation information from the service server; and a connection-information transmitting step of transmitting, by the connection-information transmitting means, the connection information for the authentication server corresponding to the received allocation information." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and Figures 2 and 3.

Regarding claim 14, Bhasin meets the claimed limitations as follows:

"A service providing method of providing the service to the terminal device in the terminal-device authentication system according to claim 4, the service providing method being adopted in a computer including allocation-information receiving means, allocation-information transmitting means, connection-information receiving means, and connection-information transmitting means, and the service providing method being characterized by comprising: an allocation-information receiving step of receiving, by the allocation-information receiving means, the allocation information from the terminal device; an allocation-information transmitting step of transmitting, by the allocation-information transmitting means, the received allocation information to the allocation system; a connection-information receiving step of receiving, by the connection-information receiving means, the connection information for the authentication server corresponding to the transmitted allocation information from the allocation system; and a connection-information transmitting step of transmitting, by the connection-information transmitting means, the received connection information to the terminal device." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and Figures 2 and 3.

Regarding claim 15, Bhasin meets the claimed limitations as follows:

"A method for a service server, of receiving the connection information for the authentication server from the allocation system according to claim 7, the method being adopted in a computer including allocation-information receiving means, first

transmitting means, first receiving means, second transmitting means, second receiving means, and connection-information transmitting means, and the method being characterized by comprising: an allocation-information receiving step of receiving, by the allocation-information receiving means, the first allocation information and the second allocation information from the terminal device; a first transmitting step of connecting to the first allocation server to transmit the received first allocation information to the first allocation server by the first transmitting means; a first receiving step of receiving, by the first receiving means, the connection information for the second allocation server corresponding to the transmitted first allocation information from the first allocation server; a second transmitting step of connecting to the second allocation server based on the connection information received in the first receiving step to transmit the second allocation information to the second allocation server by the second transmitting means; a second receiving step of receiving, by the second receiving means, the connection information for the authentication server corresponding to the transmitted second allocation information from the second allocation server; and a connection-information transmitting step of transmitting, by the connection-information transmitting means, the connection information received in the second receiving step to the terminal device." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and Figures 2 and 3.

Regarding claim 16, Bhasin meets the claimed limitations as follows: "A first allocation method of providing the connection information for the second allocation server to the service server in the allocation system according to claim 7, the first allocation method being adopted in a computer including receiving means and transmitting means, and the first allocation method being characterized by comprising: a receiving step of receiving, by the receiving means, the first allocation information from the service server; and a transmitting step of transmitting, by the transmitting means, the connection information for the second allocation server corresponding to the received first allocation information." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and Figures 2 and 3.

Regarding claim 17, Bhasin meets the claimed limitations as follows: "A second allocation method of providing the connection information for the authentication server to the service server in the allocation system according to claim 7, the second allocation method being adopted in a computer including receiving means and transmitting means, and the second allocation method being characterized by comprising: a receiving step of receiving, by the receiving means, the second allocation information from the service server; and a transmitting step of transmitting, by the transmitting means, the connection information for the authentication server corresponding to the received second allocation information.

18. A terminal device program used in the terminal device including a computer that utilizes the service provided by the service server in the terminal-device authentication system according to claim 1, the terminal device program realizing: a first receiving function of receiving the connection information for the first allocation server from the service server; a first transmitting function of connecting to the first allocation server based on the connection information received in the first receiving function to transmit the first allocation information to the first allocation server; a second receiving function of receiving the connection information for the second allocation server corresponding to the transmitted first allocation information from the first allocation server; a first transmitting function of connecting to the second allocation server based on the connection information received in the second receiving function to transmit the second allocation information to the second allocation server; a third receiving function of receiving the connection information for the authentication server corresponding to the transmitted second allocation information from the second allocation server; an authentication-information transmitting function of connecting to the authentication server based on the connection information received in the third receiving function to transmit the authentication information to the authentication server; an authentication-result receiving function of receiving the authentication result based on the authentication information transmitted in the authentication-information transmitting function from the authentication server; and an authentication-result transmitting function of transmitting the authentication result received in the authentication-result

receiving function to the service server." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and Figures 2 and 3.

Regarding claim 19, Bhasin meets the claimed limitations as follows:

"A first allocation program used in the first allocation server that is a computer providing the connection information for the second allocation server to the terminal device in the terminal-device authentication system according to claim 1, the first allocation program realizing: a receiving function of connecting to the terminal device to receive the first allocation information from the terminal device; and a transmitting function of transmitting the connection information for the second allocation server corresponding to the received first allocation information to the terminal device." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and Figures 2 and 3.

Regarding claim 20, Bhasin meets the claimed limitations as follows:

"An allocation program used in the allocation system that is a computer providing the connection information for the authentication server to the service server in the terminal-device authentication system according to claim 4, the allocation program realizing: an allocation-information receiving function of receiving the allocation information from the

service server; and a connection-information transmitting function of transmitting the connection information for the authentication server corresponding to the received allocation information." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and paragraphs [0021]-[0026]; and Figures 2, 3 and 4.

Regarding claim 21, Bhasin meets the claimed limitations as follows:

"A service server program used in the service server that is a computer providing the service to the terminal device in the terminal-device authentication system according to claim 4, the service server program realizing: an allocation-information receiving function of receiving the allocation information from the terminal device; an allocation-information transmitting function of transmitting the received allocation information to the allocation system; a connection-information receiving function of receiving the connection information for the authentication server corresponding to the transmitted allocation information from the allocation system; and a connection-information transmitting function of transmitting the received connection information to the terminal device." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and paragraphs [0021]-[0026]; and Figures 2, 3 and 4.

Regarding claim 22, Bhasin meets the claimed limitations as follows:

"A service server program used in the service server that is a computer receiving the connection information for the authentication server from the allocation system according to claim 7, the service server program realizing: an allocation-information receiving function of receiving the first allocation information and the second allocation information from the terminal device; a first transmitting function of connecting to the first allocation server to transmit the received first allocation information to the first allocation server; a first receiving function of receiving the connection information for the second allocation server corresponding to the transmitted first allocation information from the first allocation server; a second transmitting function of connecting to the second allocation server based on the connection information received in the first receiving function to transmit the second allocation information to the second allocation server; a second receiving function of receiving the connection information for the authentication server corresponding to the transmitted second allocation information from the second allocation server; and a connection-information transmitting function of transmitting the connection information received in the second receiving function to the terminal device." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and paragraphs [0021]-[0026]; and Figures 2, 3 and 4.

Regarding claim 23, Bhasin meets the claimed limitations as follows:

"A first allocation program used in the first allocation server that is a computer providing the connection information for the second allocation server to the service server in the allocation system according to claim 7, the first allocation program realizing: a receiving function of receiving the first allocation information from the service server; and a transmitting function of transmitting the connection information for the second allocation server corresponding to the received first allocation information." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and paragraphs [0021]-[0026]; and Figures 2, 3 and 4.

Regarding claim 24, Bhasin meets the claimed limitations as follows:

"A second allocation program used in the second allocation server that is a computer providing the connection information for the authentication server to the service server in the allocation system according to claim 7, the second allocation program realizing: a receiving function of receiving the second allocation information from the service server; and a transmitting function of transmitting the connection information for the authentication server corresponding to the received second allocation information." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the

Gateway server is considered the authentication server) and paragraphs [0021]-[0026]; and Figures 2, 3 and 4.

Regarding claim 25, Bhasin meets the claimed limitations as follows: "A storage medium readable by a computer storing the terminal device program according to claim 18." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and paragraphs [0021]-[0026]; and Figures 2, 3 and 4.

Regarding claim 26, Bhasin meets the claimed limitations as follows: "A storage medium readable by a computer storing the first allocation program according to claim 19." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and paragraphs [0021]-[0026]; and Figures 2, 3 and 4.

Regarding claim 27, Bhasin meets the claimed limitations as follows: "A storage medium readable by a computer storing the allocation program according to claim 20." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second

allocation server; and the Gateway server is considered the authentication server) and paragraphs [0021]-[0026]; and Figures 2, 3 and 4.

Regarding claim 28, Bhasin meets the claimed limitations as follows:

"A storage medium readable by a computer storing the service server program according to claim 21 or 22." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and paragraphs [0021]-[0026]; and Figures 2, 3 and 4.

Regarding claim 29, Bhasin meets the claimed limitations as follows:

"A storage medium readable by a computer storing the first allocation program according to claim 23." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and paragraphs [0021]-[0026]; and Figures 2, 3 and 4.

Regarding claim 30, Bhasin meets the claimed limitations as follows:

"A storage medium readable by a computer storing the second allocation program according to claim 24." see paragraphs [0016]-[0020] (Wireless client device is considered the terminal device; Origin server is considered the service server; Home agent is considered the first allocation server; Mapping server is considered the second

allocation server; and the Gateway server is considered the authentication server) and paragraphs [0021]-[0026]; and Figures 2, 3 and 4.

Regarding claim 31, Bhasin meets the claimed limitations as follows:

"The terminal device according to claim 2 further comprising: connection-information storing means for storing the connection information for the authentication server received by the third receiving means; and confirming means for confirming whether, when the connection information for the first allocation server is received from the service server, the connection information is stored in the connection-information storing means, the terminal device being characterized in that, when the confirming means confirms that the connection information is stored, the authentication-information transmitting means connects to the authentication server based on the stored connection information to transmit the authentication information." see paragraphs [0014]-[0020] (Wireless client device is considered the terminal device; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and paragraphs [0021]-[0026]; and Figures 2, 3 and 4.

Regarding claim 32, Bhasin meets the claimed limitations as follows:

"The terminal device according to claim 31, characterized in that, when the authentication-information transmitting means is not able to connect to the authentication server based on the connection information stored in the connection-information storing means, the authentication-information transmitting means uses the connection information for the authentication server, acquired by using the first

transmitting means, the second receiving means, the second transmitting means, and the third receiving means based on the connection information received by the first receiving means, to connect to the authentication server and transmits the authentication information, and in that the connection-information storing means uses the acquired connection information for the authentication server to update the stored connection information." see paragraphs [0014]-[0020] (Wireless client device is considered the terminal device; Home agent is considered the first allocation server; Mapping server is considered the second allocation server; and the Gateway server is considered the authentication server) and paragraphs [0021]-[0026]; and Figures 2, 3 and 4.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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H. Go et al (US 6,983,367).

I. Zilliacus et al (US 6,915,272).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew B. Smithers whose telephone number is (571) 272-3876. The examiner can normally be reached on Monday-Friday (8:00-4:30) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel L. Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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